

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) An electronic power source voltage regulator, comprising:
 - an input port having a first input end and a second input end;
 - an output port having a first output end and a second output end, wherein said second output end is electrically connected to said second input end so as to provide an output voltage;
 - a switch set electrically connected between said input port and an AC power source;
 - a capacitor having a first end electrically connected to said first input end and a second end electrically connected to said first output end;
 - an inductor having a first end electrically connected to said first input end; and
 - an electrical energy converter comprising an electrical energy storage device, a first output terminal, and a second output terminal, wherein said first output terminal is electrically connected to a second end of said inductor, said second output terminal is electrically connected to said first output end, and said energy converter transfers an electrical energy of said storage device into said output voltage to be output so as to stabilize said output voltage when a significant voltage difference of said AC power source occurs;

wherein said switch set further comprises a first connecting configuration, wherein said first input and second input ends are directly and electrically connected to said AC power source when a voltage value of said AC power source is within a pre-determined range; and a second

connecting configuration, wherein said first and second input ends are directly and electrically connected to each other when said voltage value of said AC power source is out of said pre-determined range.

2. (Canceled)

3. (Original) The voltage regulator according to Claim 1, wherein said electrical energy storage device is a battery.

4. (Original) The voltage regulator according to Claim 1, wherein said electrical energy converter further comprises an inverter.

5. (Original) The voltage regulator according to Claim 1, wherein said AC power source is a commercial power source.

6. (Original) The voltage regulator according to Claim 1, wherein said switch set further comprises:

a first connecting configuration, wherein said first and second input ends are directly and electrically connected to said AC power source when a frequency variation amount of said AC power source is within a pre-determined range; and

a second connecting configuration, wherein said first and second input ends are directly and electrically connected to each other when said frequency variation amount of said AC power source is out of said pre-determined range.

7. (Currently amended) An electronic power source voltage regulator, comprising:

an input port having a first input end and a second input end;

an output port having a first output end and a second output end, wherein said second output end is electrically connected to said second input end so as to provide an output voltage;

a switch set electrically connected between said input port and an AC power source;

a capacitor having a first end electrically connected to said first input end and a second end electrically connected to said first output end;

an inductor having a first end electrically connected to said first input end; and

an electrical energy converter comprising an electrical energy storage device, a first output terminal, and a second output terminal, wherein said first output terminal is electrically connected to a second end of said inductor, said second output terminal is electrically connected to said first output end, and said energy converter transfers an electrical energy of said storage device into said output voltage to be output so as to stabilize said output voltage when a significant voltage difference of said output voltage occurs;

wherein said switch set further comprises a first connecting configuration, wherein said first input and second input ends are directly and electrically connected to said AC power source when a voltage value of said AC power source is within a pre-determined range; and a second connecting configuration, wherein said first and second input ends are directly and electrically connected to each other when said voltage value of said AC power source is out of said pre-determined range.

8. (Canceled)

9. (Original) The voltage regulator according to Claim 7 wherein said electrical energy storage device is a battery.

10. (Original) The voltage regulator according to Claim 7, wherein said electrical energy converter further comprises an inverter.

11. (Original) The voltage regulator according to Claim 7, wherein said AC power source is a commercial power source.

12. (Original) The voltage regulator according to Claim 7, wherein said switch set further comprises:

a first connecting configuration, wherein said first and second input ends are directly and electrically connected to said AC power source when a frequency variation amount of said AC power source is within a pre-determined range; and

a second connecting configuration, wherein said first and second input ends are directly and electrically connected to each other when said frequency variation amount of said AC power source is out of said pre-determined range.